

Dear FCC,

*Regarding the Notice of Inquiry in ET Docket 03-104, please refer to my previous posting on 6/24/03.

*Regarding the recent posting by Adaptive Networks, Inc., and in reference to the ANSI C63.4 testing guidelines, It is very likely that the 30 meter limits are inadequate. Most residential structures are located far less than this distance to any power lines. And just the conducted noise would carry unwanted energy to a sensitive HF receiver.

*In reference to wire length tests, testing done with $1/2$, $1/4$, and $1/8$ th wavelength is inadequate because the actual conductors that will be used are millions of times greater in length than these tests, therefore the incident SWR of the system under test would have optimal results compared to the "infinite" actual lossy conductors. Also the test will not account for lossy line insulators and faulty grounds/rectifying leakages extensively found in the power system grid today.

*The antenna position test is strictly "near field" and will not account for possible skip zone distances. This is especially true for the bands between 14 and 28Mhz during the daytime. Will the test look for unwanted reception of signal at various skip distances? The polarity of the test antenna is unimportant in skip zone testing as the ionosphere will distort the polarity in a random fashion.

*The wire termination testing is again at fault because of the very long conductors that will be used. In just one wavelength the return conductor will have an open and a short to the termination, depending on base frequency. Most power service to an outlet is fed by more than $1/2$ wavelength of unshielded cable at HF frequencies, thus the return line would effectively have an open circuit to ground at these frequencies.

Summary:

The testing and proposals described by said company are inadequate to determine effective "far field" noise levels to sensitive HF band receivers. Additionally, they do not account for effects of "near field" high EIRP HF/VHF transmissions introduced into the system. Therefore this proposal is out of the question in my opinion.

Sincerely,

Thomas M. Walsh
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GROL PG-GB-029372